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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,557	12/20/2001	Michael V. Chobotov	24641-1060	4695

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EXAMINER

MUSSER, BARBARA J


ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
10/029,557	CHOBOTOV ET AL. 	
Examiner	Art Unit	
Barbara J. Musser	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
4a) Of the above claim(s) 38-48 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 and 10-18 is/are allowed.
- 6) ☒ Claim(s) 9, 19-28, 31-33 and 35-37 is/are rejected.
- 7) ☒ Claim(s) 29, 30 and 34 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/29/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-37, drawn to a method of making an endovascular graft, classified in class 156, subclass 292.
- II. Claims 38-48, drawn to an apparatus for creating seams in overlapped material, classified in class 156, subclass 379.6.
- III. Claim 49, drawn to a mandrel, classified in class 425, subclass 522.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus can be used in a different process such as forming a seam in a variety of tubular articles.
3. Inventions I and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus can be used to form a variety of tubular articles.
4. Inventions II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are

shown to be separately usable. In the instant case, invention III has separate utility such as a mandrel for forming a pipe. See MPEP § 806.05(d).

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. This application contains claims directed to the following patentably distinct species of the claimed invention: group A: the expandable member is a stent and Group B: the expandable member is an expandable connector ring.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

7. During a telephone conversation with Mr. Wong on 8/29/03 a provisional election was made with traverse to prosecute the invention of group I, claims 1-12 and 14-37. Affirmation of this election must be made by applicant in replying to this Office action. Claims 38-48 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. Additionally, applicant elected the species wherein the expandable member is an expandable connector ring.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

9. The information disclosure statement filed 8/29/03 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each foreign patent. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 19-23, 31-33, and 35-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Rogers et al.(U.S. Patent 5,534,024).

Rogers et al. discloses applying two layers of fusible material separately to a shape forming member(Figure 10) and selectively fusing the material at seams to form at least one inflatable channel.(Col. 3, ll. 51-64)

Regarding claim 20, a plurality of channels is formed.(Figure 11)

Regarding claim 21, all the channels are in fluid communication.(Figure 1, area 32; Col. 3, ll. 24-30)

Regarding claim 22, the fusible material is PTFE.(Col. 2, ll. 55-64)

Regarding claim 23, the inflatable channel can be formed by heat sealing, which is a process using heat and pressure to form a seal.(Col. 3, ll. 63-64)

Regarding claim 31, at least two seams are formed.(Figure 11)

Regarding claim 32, the channels are expanded by internal pressure in use, i.e. after formation.(Col. 2, ll. 45-54)

Regarding claim 33, a pressure line to insert fluid is located between the two fusible layers.(Figure 3) It is noted that applicant did not indicate this was inserting during formation.

Regarding claims 35 and 36, the channel is in an expanded state when it is sintered.(Figure 10) It is noted that the claim does not requiring inflating the inflatable chamber.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers et al. in view of Belke, Jr. et al.(U.S. Patent 5,783,008).

Rogers et al. discloses all the steps of claim 23, but does not disclose using a stylus to form the seams. However, it does disclose they can be formed by heat sealing.(Col. 3, ll. 64-65) Belke, Jr. et al. discloses a method of heat sealing seams using a device with a heated stylus which is movable over the surface and presses the materials to be joined together.(Col. 4, ll. 12-22) It would have been obvious to one of ordinary skill in the art at the time the invention was made to use any conventional heat sealing means such as that of Belke Jr. et al. in Rogers et al. since Rogers et al. discloses the use of any heat sealing process and since the process of Belke, Jr. et al. would not require a complicated heater that would need to be aligned precisely to form the required seams.

Regarding claim 25, while Belke, Jr. et al. does not specifically disclose automated control, it would have been obvious to one of ordinary skill in the art at the time the invention was made to automate the machine to improve process efficiency and decrease the number of workers required.

Regarding claims 27 and 28, the references are silent as to the heat and pressure used to join the layers. However, they are made of the same material as applicant's, namely PTFE, and one in the art would appreciate that the same range of pressures and temperatures would be needed in Rogers et al. and Belke, Jr. et al. to form the seams as would be required in the application since they both use the same materials.

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sterling(U.S. Patent 4,481,323) in view of Rogers et al.

Sterling discloses overlapping two fusible materials by placing a first tube over a second tube, and expanding the inflatable channel formed by the overlapping of the two tubes.(Figures 9 and 10) The reference does not disclose fixing the materials together while the tube is inflated. Rogers et al. discloses forming an inflatable channel inbetween two layers of material and then fixing the layers together.(Figure 10) It would have been obvious to one of ordinary skill in the art at the time the invention was made to fix the second tube to the first tube while the second tube is inflated since Rogers et al. discloses forming the seams while the channels are inflated and since this would allow the thinning of the material at the edge of cuff(79) without pulling or tearing of the adhesive holding the layers together.

Allowable Subject Matter

15. Claims 1-8 and 10-18 are allowed.
16. Claims 29, 30, and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
17. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 1-8 and 10-18, the prior art of record does not teach or fairly suggest forming an overlapped portion of a first fusible material and a second fusible material by disposing the materials onto a shape forming member, forming a channel in the overlapped portion, expanding the channel and fixing it while the channel is expanded. While Sterling discloses overlapping two materials, there is no suggestion of a shape forming member within the inner tube(35). Regarding claims 29 and 30, the prior art of record does not teach or fairly suggest forming an overlapped portion of a first fusible material and a second fusible material by wrapping the materials around a mandrel and forming an inflatable channel in the overlapped portion. Regarding claim 34, the prior art of record does not teach or fairly suggest a tubular member for insertion into the inflatable channel comprising a plurality of apertures whose cross sections increase in size distally along the tubular member.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara J. Musser whose telephone number is (571)

272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571)-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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